

DETAILED ACTION

1. This final office action in response to Applicant's submission filed on 07/24/2008. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. See MPEP § 706.07(a). Currently, claims 1-20 are pending. Claims 1, 9 and 17 have been amended.

Response to Amendment

2. Applicant's amendments to figure 1 and paragraph 0026 are sufficient to overcome the drawing objection set forth in the previous office action.
3. Applicant's amendments to figures 1 and 2 and paragraphs 0026 and 0074 are sufficient to overcome the specification objection set forth in the previous office action.

Response to Arguments

4. Applicant's arguments have been fully considered but they are not persuasive. Applicant argues with respect to Herer (1) the prior art with respect to claim 1 should limit new hiring to situations in which excess employees at one plant cannot be transferred to cover deficiencies at another plant, see third paragraph page 10, (2) with respect to claim 1 fails to verify whether the employees are actually transferable, see first paragraph page 11, (3) with respect to claim 1 fails to suggest determining the need to transfer employees until after the workload at each location is known, see first paragraph page 11, (4) with respect to claim 9 fails to disclose

assessing the type of workers causing excesses and deficiencies at multiple plants and limiting hiring of new workers to situations in which the identity of transferable employees at one plant is verified to be of a different type than that needed at another plant, see last paragraph page 11, (5) with respect to claim 9 fails to suggest the use of a verification process to determine whether the employees transferred, see first paragraph page 12, and in regards to Gleditsch (6) fails to disclose with respect to claim 17 adjusting production schedules at one plant to free resources to work in another plant before determining the need to hire a new employee.

5. In response Applicant's argument (1) Examiner respectfully disagrees. Herer teaches multi-location problems, section 4, page 12. With respect to hiring conditions where employees cannot be transferred Herer gives an example using intensive care nurses and regular nurses where intensive care nurses can do the job of a regular nurse but the inverse is not true therefore extra regular nurse cannot be used for intensive care work. Herer goes on to say that in these types of situations the multi-location problem can be viewed as a single or multi period problem, see sections 3.2 and 3.3 pages 10-12., where the core work force is supplemented by temporary workers based on the fluctuations in the work demand. While the example is spread across multiple sections it still conveys the essence of the claimed intention of the instant application, the first plant (intensive care) has a need however the second plant (regular nursing) cannot provide workers to fill the first plant's need therefore the first plant must hire temporary workers.

6. In response Applicant's argument (2) Examiner respectfully disagrees. Applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., verifying whether the employees are actually transferable) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).
7. In response Applicant's argument (3) Examiner respectfully disagrees. As applicant points out in the last paragraph on page 10 of the remarks "The Herer reference address multi-location problems where employees at nearby location can be transferred between locations after the workload at each location is known". The Examiner agrees with this statement. Herer expressly teaches determining workloads in multi-location problems see section 4, page 12. Herer gives an example of transferring employees between locations "[i]f we find that we need more people at the ballpark and we have too many people at the shopping mall, we can send some of the shopping mall workers over to the ball park". While the example is simple it express the invention of the instant application in determining that the first plant, i.e. the ballpark, needs additional works and the second plant, i.e. the shopping mall has too many workers thus the excess workers from the second plant are transferred to the first plant. The Examiner is unclear what Applicant is arguing on page 11 "[t]he Herer reference also fails to suggest determining the need to

transfer employees until after the workload at each location is known” which appears to be in direct disagreement to the statement made on page 10 of the remarks.

8. In response Applicant’s arguments (4) and (5) are directed towards the newly added amendments, which have been addressed in the updated rejection.
9. In response Applicant’s argument (6) Examiner respectfully disagrees and is unclear on the argument. The claim states that “a first plant production schedule cannot be changed to cover the first plant human resource deficiency and a second plant production schedule cannot be changed to free a second plant human resource to cover the first plant human resource deficiency”; however, Applicant the “adjusting production schedule at one plant to free resources to work in another plant” which appears to be in contradiction to the recited claim language. Further argument that the references fail to show certain features of applicant’s invention, it is noted that the features upon which applicant relies (i.e., adjusting production schedule at one plant to free resources to work in another plant) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Objections

1. Claims 9-12 objected to because of the following informalities: “**means for ~~determined~~ determining at least one type of worker causing the second plant**

human resource excess”. The tense of this limitation does not flow with the preceding and following limitations of the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites **“an insufficient number of the second plant human resource excess are transferable to the first plant to cover the first plant human resource deficiency”** as currently written the terms “insufficient” and “excess” contradict each other in the context of the limitation therefore is not clear what Applicant intends to claim as his invention. For purposes of examination the claim is interpreted as an insufficient number of the second plant human resources then human resource cannot be transferred from second plant to the first plant to cover the first plant human resource deficiency. Claims 2-8 depend from claim 1 therefore these claims suffer the same deficiencies.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 1, 4-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herer et al (Determining the size of the temporary workforce, published 1998).

In regards to claims 1 and 9 Herer discloses in an analogously art:

- **receiving a first plant human resource requirement for a first plant of the manufacturing system, the first and second plant human resource requirements predicting resources anticipated to be needed in advance of actually beginning related manufacturing process at the first and second plants** (p. 4-5; where the probability of distribution of the number of works required would be the same as the human resource requirement.)
- **calculating in a computer a first plant human resource difference for the first plant and a second plant human resource difference for the second plant based on the computer automatically comparing the first and second plant human resource requirements against respective first and second plant predefined human resource allocations** (p. 12; where workers needs are compared at various locations to determine an over or under staffed situation based on the workers assigned to each location)
- **determining the second plant human resource difference indicates a second plant human resource excess** (p. 12 ; where it is inherent that if it is known that too many people at one location, then the excess has been determined); **and**

- **determining a need to hire a new employee for the first plant if both**
 - (i) the first plant human resource difference indicates a first plant human resource deficiency such that the new employee is needed by the first plant to satisfy the first plant human resource requirement, and**
 - (ii) an insufficient number of the second plant human resource excess are transferable to the first plant to cover the first plant human resource deficiency.** (p. 6-7 and 11-12; where it is noted that the logic disclosed in the first scenario of single period problem without fixed cost can be applied to a multi-location problem)

Herer does not expressly teach **and receiving a second plant human resource requirement for a second plant of the manufacturing system**; however it would have been obvious to one of ordinary skill in the art at the time the invention was made that if forecasting of the human resource requirement could have been done at one plant then the process could be repeated at the second plant.

The Examiner notes that in general, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to use the inventory modeling approach as a method for planning and scheduling of current plant employees as well as for the determination of if a plant should hire new employees. One of ordinary skill in the art at the time the invention was made would have been motivated to use the teachings of Herer to develop hiring strategies based on quantitative inputs (p. 12).

In regards to claim 9, which is the system used to implement claim 1 is rejected for substantially the same reasons given with regards to claim 1. Claim 9 recites the additional limitations of:

- **in advance of determining an actual workload at the first plant, means for predicting a human resource deficiency at the first plant from the first plant human resource difference** (p. 4 "we can estimate how likely it is that we will have a certain amount of work; this can be converted into a probability distribution of the number of workers required");
- **means for determining at least one type of worker needed to cover the first plan human resource deficiency** (p. 12; where the intensive care nurses is the equivalent of a type of worker);
- **means for determined at least one type of worker causing the second plant human resource excess** (p. 12; where the regular nurse is the excess human resource).
- **means for verifying the assessment of the at least one type of worker causing the second plant human resource excess** (p. 12, see flyer example where the verification is implied in the act of transferring employees)
- **means for determining, in advance of actually determining the workload at the first plant, a need to hire a new employee to cover the first plant human resource deficiency if workers causing the second plant human resource excess are initially identified and subsequently verified to be of a different type than the type needed at the first plant** (p. 12, see nursing example when

one type of worker is not the type needed treating the problem as a single or multi-period problem and hiring temporary works to make up the need).

Herer is silent on **in advance of determining an actual workload at the second plant, means for predicting a human resource excess at the second plant from the second plant human resource difference** however it would have been obvious to one of ordinary skill in the art at the time the invention was made that if forecasting of the human resource requirement could have been done at one plant then the process could be repeated at the second plant.

While Herer is silent on how his teachings are implemented, it is old and well known in the art that a manual process could be made automated for the purpose of speed and reliability for example. And as such it has been held that it is not 'invention' to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result, see *In re Venner*, 120 USPQ 192 (CCPA 1958). Therefore in the art of human resource management it was old and well known that a computer system is used for purpose of processing various data input in order to output hiring, forecasting and scheduling needs.

In regards to claims 4 and 12 Herer teaches a method to **determining the need to hire the new employee further comprising verifying the first plant human resource deficiency to insure only authentic needs to hire a new employee are determined** (p. 7; where Herer uses a simplified example of the verification process however the Examiner notes that the day of example of Herer could be equated to a

booked order in the manufacturing environment and thus the need for new or additionally resources).

In regards to claim 12, which is the system used to implement claim 4 is rejected for substantially the same reasons given with regards to claim 4. While Herer is silent on how his teachings are implemented, it is old and well known in the art that a manual process could be made automated for the purpose of speed and reliability for example. And as such it has been held that it is not 'invention' to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result, see *In re Venner*, 120 USPQ 192 (CCPA 1958). Therefore in the art of human resource management it was old and well known that a computer system is used for purpose of processing various data input in order to output hiring, forecasting and scheduling needs.

In regards to claims 5 Herer teaches **verifying the first plant human resource deficiency** (p. 7); however Herer is silent on how this information is received. Therefore Herer does not expressly teach that the verification **comprises receiving the first plant human resource requirement in a first plant labor resource planning report, wherein the first plant labor resource planning report includes a number of predefined fields to be filed in by the first plant for the purpose of providing a breakdown of the first plant human resource requirement according to the predefined fields.**

Official notice is taken that reports containing predefined fields where old and well known in the art at the time the invention was made for the purpose of conveying information.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the old and well known technique of reports containing predefined fields to convey information regarding human resource planning needs. For instance in the simplified example of Herer (p. 7) it would have been obvious to one of ordinary skill in the art to take the information of how many workers were needed compared to the number of core workers and temporary workers to determine the spare or shortage information is the predefined fields of a report in order to convey this information to a user.

In regards to claims 6 Herer is silent on **the first labor resource planning report is a computer-readable spreadsheet and wherein calculating in the computer the first human resource difference for the first plant comprises the computer automatically comparing the first plant predefined human resource allocation and the first labor resource planning report to output a first human resource difference forecast which indicates in each field of the first labor resource planning report the corresponding human resource differences.**

Herer does teach calculations that will determine the human resource difference (p. 8, 11-12, and 15-17). It has been held that it is not 'invention' to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the

same result, see *In re Venner*, 120 USPQ 192 (CCPA 1958) and *In re Rundell*, 9 USPQ 220 (CCPA 1931).

In regards to claims 7 Herer teaches **the received human resource requirements include a three month forecast of human resource requirements for the first plant and wherein verifying the human resource deficiency of the first plant comprises determining the human resource deficiency of the first plant extends beyond 90 days** (p. 10-11).

In regards to claims 8 Herer teaches **comprising determining a need to hire a temporary employee if the human resource deficiency of the first plant fails to extend beyond 90 days** (p. 11-12).

14. Claims 2, 3, 10, 11, 13-16 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herer et al (Determining the size of the temporary workforce, published 1998) as applied to claims 1 and 9 above and further in view of Gleditsch et al (US Patent 6,393,332 B1).

In regards to claims 2 and 10, Herer is silent on **determining the need to hire the new employee further comprises comparing a first plant production schedule and the first plant human resource difference to determine that the first plant production schedule cannot be changed to cover the first plant human resource deficiency**.

Gleditsch teaches in an analogous art that manufacturing schedules cannot be easily altered; as such relationships and constraints associated with the process must

be accurately modeled in order to minimize material disruptions (col. 2, lines 48-67 and col.3, lines 1-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Gleditsch, the accurate modeling of resource needs in light of un-easily adjustable schedule, in association with the human resource inventory modeling of Herer to schedule manufacturing resources (human resources) automatically adjust the demand, based on the parameters relating to the resource (Gleditsch col. 3, lines 38-40).

In regards to claim 10, which is the system used to implement claim 2 is rejected for substantially the same reasons given with regards to claim 2. While Herer is silent on how his teachings are implemented, it is old and well known in the art that a manual process could be made automated for the purpose of speed and reliability for example. And as such it has been held that it is not 'invention' to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result, see *In re Venner*, 120 USPQ 192 (CCPA 1958). Therefore in the art of human resource management it was old and well known that a computer system is used for purpose of processing various data input in order to output hiring, forecasting and scheduling needs.

In regards to claim 3 and 11 Herer is silent on **determining the need to hire the new employee further comprises comparing a second plant production schedule and the second plant human resource difference to learn that the second plant**

production schedule cannot be changed to allocate second plant human resources to the first plant to cover the first plant human resource deficiency.

It has been held that the mere duplication of parts has no patentable significance unless new and unexpected result is produced, see *In re Harza*, 124 USPQ 378 (CCPA 1960). It is the Examiner understanding that these limitations to be a duplication of claim 2 and 10 respectively and as such is rejected for substantially the same reason given above with regards to claims 2 and 10.

In regards to claim 13, which is the system used to implement claim 5 is rejected for substantially the same reasons given with regards to claim 5. While Herer is silent on how his teachings are implemented, it is old and well known in the art that a manual process could be made automated for the purpose of speed and reliability for example. And as such it has been held that it is not 'invention' to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result, see *In re Venner*, 120 USPQ 192 (CCPA 1958). Therefore in the art of human resource management it was old and well known that a computer system is used for purpose of processing various data input in order to output hiring, forecasting and scheduling needs.

In regards to claim 14, which is the system used to implement claim 6 is rejected for substantially the same reasons given with regards to claim 6. While Herer is silent on how his teachings are implemented, it is old and well known in the art that a manual process could be made automated for the purpose of speed and reliability for example. And as such it has been held that it is not 'invention' to broadly provide a mechanical or

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automatic means to replace manual activity which has accomplished the same result, see *In re Venner*, 120 USPQ 192 (CCPA 1958). Therefore in the art of human resource management it was old and well known that a computer system is used for purpose of processing various data input in order to output hiring, forecasting and scheduling needs.

In regards to claim 15, which is the system used to implement claim 7 is rejected for substantially the same reasons given with regards to claim 7. While Herer is silent on how his teachings are implemented, it is old and well known in the art that a manual process could be made automated for the purpose of speed and reliability for example. And as such it has been held that it is not 'invention' to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result, see *In re Venner*, 120 USPQ 192 (CCPA 1958). Therefore in the art of human resource management it was old and well known that a computer system is used for purpose of processing various data input in order to output hiring, forecasting and scheduling needs.

In regards to claim 16, which is the system used to implement claim 8 is rejected for substantially the same reasons given with regards to claim 8. While Herer is silent on how his teachings are implemented, it is old and well known in the art that a manual process could be made automated for the purpose of speed and reliability for example. And as such it has been held that it is not 'invention' to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result, see *In re Venner*, 120 USPQ 192 (CCPA 1958). Therefore in the art of human

resource management it was old and well known that a computer system is used for purpose of processing various data input in order to output hiring, forecasting and scheduling needs.

In regards to claim 17 which recites limitation that are similar to claim 1 as such is rejected for substantially the same reasons given with regards to claim 1. Claim 17 recites the additional limitations of **(iii) a first plant production schedule cannot be changed to cover the first plant human resource deficiency**. This limitation is added to the third bullet of Claim 1. Herer is silent on additional constraints one of ordinary skill in the art might consider in regards to the field of manufacturing as it relates to the hiring of additional workers.

Gleditsch teaches in an analogous art that manufacturing schedules cannot be easily altered; as such relationships and constraints associated with the process must be accurately modeled in order to minimize material disruptions (col. 2, lines 48-67 and col.3, lines 1-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the teachings of Gleditsch, the accurate modeling of resource needs in light of un-easily adjustable schedule, in association with the human resource inventory modeling of Herer to schedule manufacturing resources (human resources) automatically adjust the demand, based on the parameters relating to the resource (Gleditsch col. 3, lines 38-40).

In regards to claim 18, which is similar to claim 4, is rejected for substantially the same reasons given with regards to claim 4.

In regards to claim 19, which is similar to claim 5, is rejected for substantially the same reasons given with regards to claim 5.

In regards to claim 20, which is similar to claim 7, is rejected for substantially the same reasons given with regards to claim 7.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FOLASHADE ANDERSON whose telephone number is (571)270-3331. The examiner can normally be reached on Monday through Thursday 8:00 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Folashade Anderson/
Examiner, Art Unit 3623

/Andre Boyce/
Primary Examiner, Art Unit 3623